



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 17758

TO: Marcela Cordero Garcia

Location: rem/3C35/3C18

Art Unit: 1654

Thursday, February 09, 2006

Case Serial Number: 10/699449

From: Mary Jane Ruhl

Location: Biotech-Chem Library

Remsen 1-A-62

Phone: 571-272-2524

maryjane.ruhl@uspto.gov

Search Notes

Examiner Cordero Garcia,

Here are the results for your recent search request.

Please feel free to contact me if you have any questions about these results.

Thank you for using STIC services. We appreciate the opportunity to serve you.

Sincerely,

Mary Jane Ruhl

Technical Information Specialist

STIC

Remsen 1-A-62

Ext. 22524

STIC-Biotech/ChemLib

177581

me

From: Cordero Garcia, Marcela M.
Sent: Wednesday, January 25, 2006 11:27 AM
To: STIC-Biotech/ChemLib
Subject: Database Search Request, Serial Number: 10/699,449

RECEIVED
JAN 25 2006
STIC-BIOTECH/CHEM LIB
(STIC)

Requester:
MARCELA CORDERO GARCIA (P/1654)
Art Unit:
GROUP ART UNIT 1654
Employee Number:
80381
Office Location:
REM 03C35
Phone Number:
(571)272-2939
Mailbox Number:
REM 3C18

Case serial number:
10/699,449
Class / Subclass(es):
514/1
Earliest Priority Filing Date:
10/31/03
Format preferred for results:
Paper
Search Topic Information:

Please search a method of separation of glycosylated proteins from unglycosylated proteins using a resin with a nucleophile bound to it.
Special Instructions and Other Comments:

Karla M. Robotti
10/31/2003
Enhancement of tagging of glycosylated proteins

Searcher: _____
Searcher Phone: _____
Date Searcher Picked up: _____
Date completed: _____
Searcher Prep Time: _____
Online Time: _____

Type of Search
NA# _____ AA# _____
S/L: _____ Oligomer: _____
Encode/Transl: _____
Structure #: _____ Text: _____
Inventor: _____ Litigation: _____

Vendors and cost where applicable
STN: _____
DIALOG: _____
QUESTEL/ORBIS: _____
LEXIS/NEXIS: _____
SEQUENCE SYSTEM: _____
WWW/Internet: _____
Other (Specify): _____

=> d his ful

(FILE 'HOME' ENTERED AT 15:57:14 ON 09 FEB 2006)

FILE 'HCAPLUS' ENTERED AT 16:47:57 ON 09 FEB 2006

E ROBOTTI KARLA M/AU

L29 17 SEA ABB=ON ("ROBOTTI KARLA"/AU OR "ROBOTTI KARLA M"/AU OR
"ROBOTTI KARLA MARIE"/AU)
L30 1 SEA ABB=ON L29 AND ?GLYCOSYLAT?(W)?PROTEIN?
L31 ANALYZE L30 1-1 CT : 5 TERMS
L32 124 SEA ABB=ON ?GLYCOSYLAT?(W)?PROTEIN? AND GEL?(W)?ELECTROPHORES?
L33 289 SEA ABB=ON ?GLYCOSYLAT?(W)?PROTEIN? AND (?SEPARAT? OR
GEL?(W)?ELECTROPHORES?)
L34 1 SEA ABB=ON L33 AND ?RESIN?(3A)?NUCLEOPHIL?
L35 2 SEA ABB=ON L33 AND ?RESIN?
L36 2 SEA ABB=ON L34 OR L35
L37 1 SEA ABB=ON L36 AND (PRD<20031031 OR PD<20031031) *1 cit from CAPLUS*

FILE 'MEDLINE, BIOSIS, EMBASE, JAPIO, JICST-EPLUS' ENTERED AT 16:54:12 ON
09 FEB 2006

L38 4 SEA ABB=ON L36
L39 2 DUP REMOV L38 (2 DUPLICATES REMOVED) *2 cit from above d.b.'s*

FILE 'USPATFULL' ENTERED AT 16:54:55 ON 09 FEB 2006

L40 1440 SEA ABB=ON L36 AND (PRD<20031031 OR PD<20031031)
L41 1058 SEA ABB=ON L40 AND GEL?(W)?ELECTROPHOR?
L42 1023 SEA ABB=ON L41 AND ?CHROMATOG?
L43 650 SEA ABB=ON L42 AND (HPLC OR ?HIGH?(W)?PRESS?(W)?LIQUID?(W)?CHR
OMATOG?)
L44 56 SEA ABB=ON L43 AND ?NUCLEOPHIL?
L45 0 SEA ABB=ON L44 AND ?TEST?(W)KIT?
L46 49 SEA ABB=ON L44 AND KIT?
L47 25 SEA ABB=ON L46 AND (?SOLID?(W)?PHASE?(W)?SYNTH?) *25 cit from
USPatful*

FILE HOME

FILE HCAPLUS

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FILE COVERS 1907 - 9 Feb 2006 VOL 144 ISS 7
FILE LAST UPDATED: 8 Feb 2006 (20060208/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 7 FEB 2006 HIGHEST RN 873775-18-9
DICTIONARY FILE UPDATES: 7 FEB 2006 HIGHEST RN 873775-18-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Structure search iteration limits have been increased. See HELP SLIMITS
for details.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

FILE MEDLINE

FILE LAST UPDATED: 8 FEB 2006 (20060208/UP). FILE COVERS 1950 TO DATE.

On December 11, 2005, the 2006 MeSH terms were loaded.

The MEDLINE reload for 2006 will soon be available. For details
on the 2005 reload, enter HELP RLOAD at an arrow prompt (=>).
See also:

<http://www.nlm.nih.gov/mesh/>
http://www.nlm.nih.gov/pubs/techbull/nd04/nd04_mesh.html
http://www.nlm.nih.gov/pubs/techbull/nd05/nd05_med_data_changes.html
http://www.nlm.nih.gov/pubs/techbull/nd05/nd05_2006_MeSH.html

OLDMEDLINE is covered back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the
MeSH 2006 vocabulary.

This file contains CAS Registry Numbers for easy and accurate

FILE BIOSIS

FILE COVERS 1969 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 8 February 2006 (20060208/ED)

FILE EMBASE

FILE COVERS 1974 TO 2 Feb 2006 (20060202/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE JAPIO

FILE LAST UPDATED: 7 FEB 2006 <20060207/UP>

FILE COVERS APR 1973 TO SEPTEMBER 29, 2005

>>> GRAPHIC IMAGES AVAILABLE <<<

>>> NEW IPC8 DATA AND FUNCTIONALITY NOT YET AVAILABLE IN THIS FILE.
USE IPC7 FORMAT FOR SEARCHING THE IPC. WATCH THIS SPACE FOR FURTHER
DEVELOPMENTS AND SEE OUR NEWS SECTION FOR FURTHER INFORMATION
ABOUT THE IPC REFORM <<<

FILE JICST-EPLUS

FILE COVERS 1985 TO 7 FEB 2006 (20060207/ED)

THE JICST-EPLUS FILE HAS BEEN RELOADED TO REFLECT THE 1999 CONTROLLED
TERM (/CT) THESAURUS RELOAD.

FILE USPATFULL

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 9 Feb 2006 (20060209/PD)

FILE LAST UPDATED: 9 Feb 2006 (20060209/ED)

HIGHEST GRANTED PATENT NUMBER: US6996845

HIGHEST APPLICATION PUBLICATION NUMBER: US2006031974

CA INDEXING IS CURRENT THROUGH 9 Feb 2006 (20060209/UPCA)

ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 9 Feb 2006 (20060209/PD)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2005

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2005

determined by NMR spectroscopy. The kinetic mechanism of the **reaction** was analyzed using the macrolide antibiotic lankamycin (LK) as substrate. The **reaction** operates via a compulsory order mechanism. This has been shown by steady-state kinetic studies and by isotopic exchange **reactions** at equilibrium. LK binds first to the enzyme, followed by UDP-glucose. A ternary complex is thus formed prior to transfer of glucose. UDP is then released, followed by the glycosylated lankamycin (GS-LK). A pH study of the **reaction** was performed to determine values for the molecular pK values, suggesting possible amino acid residues involved in the catalytic process.

L15 ANSWER 5 OF 6 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2005026572 EMBASE
TITLE: One-pot glycosylation (OPG) for the chemical synthesis of oligosaccharides.
AUTHOR: Yu B.; Yang Z.; Cao H.
CORPORATE SOURCE: B. Yu, State Key Laboratory of Bio-Organic, Shanghai Inst. of Organic Chemistry, Chinese Academy of Sciences, 354 Fenglin Road, Shanghai 200032, China. byu@pub.sioc.ac.cn
SOURCE: Current Organic Chemistry, (2005) Vol. 9, No. 2, pp. 179-194. .
Refs: 63
ISSN: 1385-2728 CODEN: CORCFE
COUNTRY: Netherlands
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 20050127
Last Updated on STN: 20050127

AB This review provides a comprehensive survey of the "one pot glycosylation" (OPG) strategy for the chemical synthesis of oligosaccharides, covering literatures from the first example reported by Kahne and Raghavan in 1993 through May 2003. The essence of the OPG is to distinguish the reactivity difference of a pair of the glycosylation donors or acceptors so as to carry out two **glycosylation** steps sequentially without **purification** of the first-step coupling product. Accordingly, the literature reports are grouped based on the major stereoelectronic factors causing the reactivity differences, those include the "armed-disarmed effect", "orthogonality of leaving groups", "distinguishable acceptors", and "the hybrid". "The hybrid" OPG procedure takes advantage of a combination of the reactivity disparity of a set of the armed-disarmed donors, orthogonal leaving groups, as well as acceptors so as to proceed three or more steps of glycosylation sequentially in one pot. Relevant conception and exploitation of the reactivity differences of the donors and acceptors in the synthesis of oligosaccharides, which finally evolve the OPG or advance parallelly, are briefly described at the beginning. .COPYRG. 2005 Bentham Science Publishers Ltd.

L15 ANSWER 6 OF 6 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2004229185 EMBASE
TITLE: Fluorous thiols in oligosaccharide synthesis.
AUTHOR: Jing Y.; Huang X.
CORPORATE SOURCE: X. Huang, Department of Chemistry, University of Toledo, 2801 W. Bancroft Street, Toledo, OH 43606-3390, United States. xuefei.huang@utoledo.edu
SOURCE: Tetrahedron Letters, (7 Jun 2004) Vol. 45, No. 24, pp. 4615-4618. .
Refs: 38
ISSN: 0040-4039 CODEN: TELEAY
PUBLISHER IDENT.: S 0040-4039(04)00920-7
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 20040628
Last Updated on STN: 20040628

AB A new, almost odorless fluorous thiol is synthesized, which is utilized to prepare highly fluorinated thioglycosyl donors. These thioglycosides showed excellent reactivities in glycosylation **reactions**. The fluorous chain, stable under esterification, etherification, deacetylation, and **glycosylation** conditions, allowed facile **purification** of the thioglycosides by solid-phase extraction through fluorous silica gel. The fluorous thiol was readily recycled.
.COPYRGT. 2004 Elsevier Ltd. All rights reserved.

=> logoff h

COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 133.90 | 134.11 |

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| -18.00 | -18.00 |

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SESSION WILL BE HELD FOR 60 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 13:42:59 ON 21 MAR 2006

=> d que stat 137

```
L33      289 SEA FILE=HCAPLUS ABB=ON  ?GLYCOSYLAT?(W)?PROTEIN? AND (?SEPARAT
? OR GEL?(W)?ELECTROPHORES?)
L34      1 SEA FILE=HCAPLUS ABB=ON  L33 AND ?RESIN?(3A)?NUCLEOPHIL?
L35      2 SEA FILE=HCAPLUS ABB=ON  L33 AND ?RESIN?
L36      2 SEA FILE=HCAPLUS ABB=ON  L34 OR L35
L37      1 SEA FILE=HCAPLUS ABB=ON  L36 AND (PRD<20031031 OR PD<20031031)
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=> d ibib abs 137 1-1

L37 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1983:419076 HCAPLUS
 DOCUMENT NUMBER: 99:19076
 TITLE: Characterization of glycosylated hemoglobins.
 Relevance to monitoring of diabetic control and
 analysis of other proteins
 AUTHOR(S): Garlick, Robert L.; Mazer, Jonathan S.; Higgins, Paul
 J.; Bunn, H. Franklin
 CORPORATE SOURCE: Howard Hughes Med. Inst., Harvard Med. Sch., Boston,
 MA, 02115, USA
 SOURCE: Journal of Clinical Investigation (1983),
 71(5), 1062-72
 CODEN: JCINAO; ISSN: 0021-9738
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Boronate affinity chromatog. and ion-exchange chromatog. were used to
 measure the levels of glycosylated Hbs in normal and diabetic hemolyzates,
 as well as the distribution of glucose adducts on α -NH₂-valine and
 ϵ -NH₂-lysine residues. When analyzed by ion-exchange chromatog.
 on BioRex 70 **resin**, the Hb Alc peak comprised 4.4% of 15 normal
 hemolyzates and 9.1% of 15 diabetic hemolyzates. The Hb Alc was
 rechromatographed on GlycoGel B boronate affinity **resin** that
 binds vicinal hydroxyl groups of covalently linked sugars. Only 70% of
 the Hb adhered to the **resin**. Anal. by the thiobarbituric acid
 colorimetric test confirmed that the affinity **resin** effectively
separated glycosylated from nonglycosylated Hb. When corrected for
 nonglycosylated contaminants, the mean level of Hb Alc in normal
 hemolyzates was 2.9%, a value considerably lower than those previously
 reported. In addition to Hb Alc, 5.2% of the remaining Hb (Hb A0) was
 glycosylated. In diabetics, glycosylated A0 was increased in parallel
 with Hb Alc. After reduction with [3H]borohydride and acid hydrolysis,
 glycosylated amino acids were 1st purified on Affi-Gel boronate affinity
resin and then analyzed by ion-exchange chromatog. The glucose
 adducts on Hb A0 were distributed as follows: α -chain N-terminal
 valine, 14%; α -chain lysines, 40%; β -chain lysines, 46%.
 Several pitfalls in the anal. of nonenzymically **glycosylated**
proteins were revealed. Peaks isolated by ion-exchange chromatog.
 or electrophoresis are likely to be contaminated by
nonglycosylated proteins. Furthermore, both the
 thiobarbituric acid test and [3H]borohydride reduction show variable
 reactivity depending upon the site of the ketoamine-linked glucose.

=> => d que stat 139

```
L33      289 SEA FILE=HCAPLUS ABB=ON  ?GLYCOSYLAT?(W)?PROTEIN? AND (?SEPARAT
? OR GEL?(W)?ELECTROPHORES?)
L34      1 SEA FILE=HCAPLUS ABB=ON  L33 AND ?RESIN?(3A)?NUCLEOPHIL?
L35      2 SEA FILE=HCAPLUS ABB=ON  L33 AND ?RESIN?
```


L36 2 SEA FILE=HCAPLUS ABB=ON L34 OR L35
L38 4 SEA L36
L39 " 2 DUP REMOV L38 (2 DUPLICATES REMOVED)

=> d ibib abs l39 1-2

L39 ANSWER 1 OF 2 MEDLINE on STN
ACCESSION NUMBER: 1998242562 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9581461
TITLE: The effects of reductive dissociation of gastric mucin isolated in the presence of proteinase inhibitors.
AUTHOR: Minkiewicz I; Gindzienski A; Kisiel D G
CORPORATE SOURCE: Departament of General and Organic Chemistry, Medical Academy of Bialystok.
SOURCE: Roczniki Akademii Medycznej w Bialymstoku (1995), (1997) 42 (1) 26-34.
Journal code: 9515551.
PUB. COUNTRY: Poland
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199806
ENTRY DATE: Entered STN: 19980618
Last Updated on STN: 19980618
Entered Medline: 19980609

AB Mucin was purified by the gel filtration method on columns with high porous molecular sieves in buffers with SDS and proteinase inhibitors. The addition of proteinase inhibitors distinctly inhibited proteolytic activity. It was found that the obtained mucin, after disulphide-bound reduction, is dissociated to mucin subunits and N-glycosylated glycoprotein of molecular weight about 75 kDa. This protein has carbohydrate and amino acid composition different from high molecular fraction. The 75 kDa protein is strongly associated with high molecular mass mucin subunits and can be **separated** either during electrophoresis or fractionation in buffers with 2-mercaptoethanol.

L39 ANSWER 2 OF 2 MEDLINE on STN DUPLICATE 1
ACCESSION NUMBER: 83213912 MEDLINE
DOCUMENT NUMBER: PubMed ID: 6406542
TITLE: Characterization of glycosylated hemoglobins. Relevance to monitoring of diabetic control and analysis of other proteins.
AUTHOR: Garlick R L; Mazer J S; Higgins P J; Bunn H F
CONTRACT NUMBER: AM-18223 (NIADDK)
SOURCE: Journal of clinical investigation, (1983 May) 71 (5) 1062-72.
Journal code: 7802877. ISSN: 0021-9738.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 198307
ENTRY DATE: Entered STN: 19900319
Last Updated on STN: 19970203
Entered Medline: 19830708

AB Boronate affinity chromatography and ion exchange chromatography were used to measure the levels of glycosylated hemoglobins in normal and diabetic hemolysates, as well as the distribution of glucose adducts on alpha-NH2-valine and epsilon-NH2-lysine residues. When analyzed by ion

exchange chromatography on BioRex 70 **resin**, the Hb Alc peak comprised 4.4 +/- 0.6% of 15 normal hemolysates and 9.1 +/- 2.1% of 15 diabetic hemolysates. The "Hb Alc" was rechromatographed on GlycoGel B boronate affinity **resin** that binds vicinal hydroxyl groups of covalently linked sugars. Only 70 +/- 5% of the hemoglobin adhered to the **resin**. Analysis by the thiobarbituric acid colorimetric test confirmed that the affinity **resin** effectively **separated** glycosylated from nonglycosylated hemoglobin. When corrected for nonglycosylated contaminants, the mean level of Hb Alc in normal hemolysates was 2.9 +/- 0.4%, a value considerably lower than those previously reported. In addition to Hb Alc, 5.2 +/- 0.5% of the remaining hemoglobin (Hb Ao) was glycosylated. In diabetics, glycosylated Ao was increased in parallel with Hb Alc. After reduction with [3H]borohydride and acid hydrolysis, glycosylated amino acids were first purified on Affi-Gel boronate affinity **resin** and then analyzed by ion exchange chromatography. The glucose adducts on Hb Ao were distributed as follows: alpha-chain N-terminal valine, 14%; alpha-chain lysines, 40%; beta-chain lysines, 46%. This study has revealed several pitfalls in the analysis of nonenzymatically **glycosylated proteins**. Peaks isolated by ion exchange chromatography or electrophoresis are likely to be contaminated by **nonglycosylated proteins**. Furthermore, both the thiobarbituric acid test and [3H]borohydride reduction show variable reactivity depending upon the site of the ketoamine-linked glucose.

=> □ „

=> d que stat 147

```

L33      289 SEA FILE=HCAPLUS ABB=ON  ?GLYCOSYLAT?(W)?PROTEIN? AND (?SEPARAT
        ? OR GEL?(W)?ELECTROPHORES?)
L34      1 SEA FILE=HCAPLUS ABB=ON  L33 AND ?RESIN?(3A)?NUCLEOPHIL?
L35      2 SEA FILE=HCAPLUS ABB=ON  L33 AND ?RESIN?
L36      2 SEA FILE=HCAPLUS ABB=ON  L34 OR L35
L40     1440 SEA FILE=USPATFULL ABB=ON  L36 AND (PRD<20031031 OR PD<20031031
        )
L41     1058 SEA FILE=USPATFULL ABB=ON  L40 AND GEL?(W)?ELECTROPHOR?
L42     1023 SEA FILE=USPATFULL ABB=ON  L41 AND ?CHROMATOG?
L43      650 SEA FILE=USPATFULL ABB=ON  L42 AND (HPLC OR ?HIGH?(W)?PRESS?(W)
        ?LIQUID?(W)?CHROMATOG?)
L44      56 SEA FILE=USPATFULL ABB=ON  L43 AND ?NUCLEOPHIL?
L46      49 SEA FILE=USPATFULL ABB=ON  L44 AND KIT?
L47      25 SEA FILE=USPATFULL ABB=ON  L46 AND (?SOLID?(W)?PHASE?(W)?SYNTH?
        )

```

=> d ibib abs 147 1-25

L47 ANSWER 1 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2006:34747 USPATFULL

TITLE: Remodeling and glycoconjugation of peptides

INVENTOR(S): DeFrees, Shawn, North Wales, PA, UNITED STATES

Zopf, David, Wayne, PA, UNITED STATES

Bayer, Robert, San Diego, CA, UNITED STATES

Bowe, Caryn, Doylestown, PA, UNITED STATES

Hakes, David, Willow Grove, PA, UNITED STATES

Chen, Xi, Lansdale, PA, UNITED STATES

PATENT ASSIGNEE(S): Neose Technologies, Inc., Horsham, PA, UNITED STATES
(U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|---------------|
| PATENT INFORMATION: | US 2006030521 | A1 | 20060209 |
| APPLICATION INFO.: | US 2005-183205 | A1 | 20050715 (11) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 2002-287994, filed on 5 Nov 2002, PENDING Continuation of Ser. No. WO 2002-US32263, filed on 9 Oct 2002, PENDING | | |

| | NUMBER | DATE | |
|-----------------------|-----------------|---------------|-----|
| PRIORITY INFORMATION: | US 2002-407527P | 20020828 (60) | <-- |
| | US 2002-404249P | 20020816 (60) | <-- |
| | US 2002-396594P | 20020717 (60) | <-- |
| | US 2002-391777P | 20020625 (60) | <-- |
| | US 2002-387292P | 20020607 (60) | <-- |
| | US 2001-334301P | 20011128 (60) | <-- |
| | US 2001-334233P | 20011128 (60) | <-- |

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: MORGAN, LEWIS & BOCKIUS LLP (SF), 2 PALO ALTO SQUARE,
3000 El Camino Real, Suite 700, PALO ALTO, CA, 94306,
US

NUMBER OF CLAIMS: 43

EXEMPLARY CLAIM: 1-57

NUMBER OF DRAWINGS: 345 Drawing Page(s)

LINE COUNT: 16410

AB .The invention includes methods and compositions for remodeling a peptide molecule, including the addition or deletion of one or more glycosyl groups to a peptide, and/or the addition of a modifying group a peptide.

L47 ANSWER 2 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2005:144275 USPATFULL

TITLE: Whole cell engineering by mutagenizing a substantial portion of a starting genome combining mutations and optionally repeating

INVENTOR(S): Short, Jay M, Rancho Santa Fe, CA, UNITED STATES
Fu, Pengcheng, Lowrey Avenue, HI, UNITED STATES
Wei, Jing, San Diego, CA, UNITED STATES
Levin, Michael, San Diego, CA, UNITED STATES
Latterich, Martin, Montellano Terrace, San Diego, CA, UNITED STATES

| | NUMBER | KIND | DATE |
|---------------------|-----------------|------|---------------|
| PATENT INFORMATION: | US 2005124010 | A1 | 20050609 |
| APPLICATION INFO.: | US 2003-398271 | A1 | 20011001 (10) |
| | WO 2001-US31004 | | 20011001 |

| | NUMBER | DATE | |
|-----------------------|--|---------------|-----|
| PRIORITY INFORMATION: | US 2003-9677584 | 20000930 | <-- |
| | US 2003-279702P | 20010328 (60) | <-- |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | APPLICATION | | |
| LEGAL REPRESENTATIVE: | FISH & RICHARDSON, PC, 12390 EL CAMINO REAL, SAN DIEGO, CA, 92130-2081, US | | |
| NUMBER OF CLAIMS: | 179 | | |
| EXEMPLARY CLAIM: | 1 | | |
| NUMBER OF DRAWINGS: | 31 Drawing Page(s) | | |
| LINE COUNT: | 31291 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to the field of cellular and whole organism engineering. Specifically, this invention relates to a cellular transformation, directed evolution, and screening method for creating novel transgenic organisms having desirable properties. Thus in one aspect, this invention relates to a method of generating a transgenic organism, such as a microbe or a plant, having a plurality of traits that are differenentially activatable.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L47 ANSWER 3 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2005:124269 USPATFULL

TITLE: Remodeling and glycoconjugation of peptides

INVENTOR(S): DeFrees, Shawn, North Wales, PA, UNITED STATES
Zopf, David, Wayne, PA, UNITED STATES
Bayer, Robert, San Diego, CA, UNITED STATES
Bowe, Caryn, Doylestown, PA, UNITED STATES
Hakes, David, Willow Grove, PA, UNITED STATES
Chen, Xi, Woodland, CA, UNITED STATES

| | NUMBER | KIND | DATE |
|---------------------|---------------|------|----------|
| PATENT INFORMATION: | US 2005106658 | A1 | 20050519 |

APPLICATION INFO.: US 2003-492261 A1 20021009 (10)
 WO 2002-US32263 20021009

| | NUMBER | DATE | |
|-----------------------|-----------------|---------------|-----|
| PRIORITY INFORMATION: | US 2003-328523P | 20011010 (60) | <-- |
| | US 2003-344692P | 20011019 (60) | <-- |
| | US 2003-334233P | 20011128 (60) | <-- |
| | US 2003-334301P | 20011128 (60) | <-- |
| | US 2003-387292P | 20020607 (60) | <-- |
| | US 2003-391777P | 20020625 (60) | <-- |
| | US 2003-396594P | 20020717 (60) | <-- |
| | US 2003-404249P | 20020816 (60) | <-- |
| | US 2003-407527P | 20020828 (60) | <-- |

DOCUMENT TYPE: Utility
 FILE SEGMENT: APPLICATION
 LEGAL REPRESENTATIVE: MORGAN, LEWIS & BOCKIUS LLP, 1701 MARKET STREET,
 PHILADELPHIA, PA, 19103-2921, US
 NUMBER OF CLAIMS: 447
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 345 Drawing Page(s)
 LINE COUNT: 18300

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention includes methods and compositions for remodeling a peptide molecule, including the addition or deletion of one or more glycosyl groups to a peptide, and/or the addition of a modifying group of peptide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L47 ANSWER 4 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2005:117715 USPATFULL
 TITLE: Factor IX: remodeling and glycoconjugation of factor IX
 INVENTOR(S): DeFrees, Shawn, North Wales, PA, UNITED STATES
 Zopf, David, Wayne, PA, UNITED STATES
 Bayer, Robert, San Diego, CA, UNITED STATES
 Bowe, Caryn, Doylestown, PA, UNITED STATES
 Hakes, David, Willow Grove, PA, UNITED STATES
 Chen, Xi, Lansdale, PA, UNITED STATES
 PATENT ASSIGNEE(S): Neose Technologies, Inc. (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|---|------|---------------|
| PATENT INFORMATION: | US 2005100982 | A1 | 20050512 |
| APPLICATION INFO.: | US 2003-410897 | A1 | 20030409 (10) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 2003-360779, filed on 19 Feb 2003, PENDING Continuation-in-part of Ser. No. US 2003-360770, filed on 6 Jan 2003, PENDING Continuation-in-part of Ser. No. US 2002-287994, filed on 5 Nov 2002, PENDING Continuation of Ser. No. WO 2002-US32263, filed on 9 Oct 2002, PENDING | | |

| | NUMBER | DATE | |
|-----------------------|-----------------|---------------|-----|
| PRIORITY INFORMATION: | US 2002-407527P | 20020828 (60) | <-- |
| | US 2002-404249P | 20020816 (60) | <-- |
| | US 2002-396594P | 20020717 (60) | <-- |
| | US 2002-391777P | 20020625 (60) | <-- |
| | US 2002-387292P | 20020607 (60) | <-- |
| | US 2001-334301P | 20011128 (60) | <-- |

US 2001-334233P 20011128 (60) <--
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MORGAN, LEWIS & BOCKIUS LLP, 1701 MARKET STREET,
PHILADELPHIA, PA, 19103-2921, US
NUMBER OF CLAIMS: 88
EXEMPLARY CLAIM: 1-112
NUMBER OF DRAWINGS: 497 Drawing Page(s)
LINE COUNT: 19035
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention includes methods and compositions for remodeling a peptide
molecule, including the addition or deletion of one or more glycosyl
groups to a peptide, and/or the addition of a modifying group to a
peptide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L47 ANSWER 5 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2005:36910 USPATFULL
TITLE: Interleukin-2:remodeling and glycoconjugation of
interleukin-2
INVENTOR(S): DeFrees, Shawn, North Wales, PA, UNITED STATES
Zopf, David, Wayne, PA, UNITED STATES
Bayer, Robert, San Diego, CA, UNITED STATES
Bowe, Caryn, Doylestown, PA, UNITED STATES
Hakes, David, Willow Grove, PA, UNITED STATES
Chen, Xi, Lansdale, PA, UNITED STATES
PATENT ASSIGNEE(S): Neose Technologies, Inc. (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|---------------|
| PATENT INFORMATION: | US 2005031584 | A1 | 20050210 |
| APPLICATION INFO.: | US 2003-410980 | A1 | 20030409 (10) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 2003-360779, filed on 19 Feb 2003, PENDING Continuation-in-part of Ser. No. US 2003-360770, filed on 6 Jan 2003, PENDING Continuation-in-part of Ser. No. US 2002-287994, filed on 5 Nov 2002, PENDING Continuation of Ser. No. WO 2002-US32263, filed on 9 Oct 2002, PENDING | | |

| | NUMBER | DATE |
|-----------------------|-----------------|-------------------|
| PRIORITY INFORMATION: | US 2002-407527P | 20020828 (60) <-- |
| | US 2002-404249P | 20020816 (60) <-- |
| | US 2002-396594P | 20020717 (60) <-- |
| | US 2002-391777P | 20020625 (60) <-- |
| | US 2002-387292P | 20020607 (60) <-- |
| | US 2001-334301P | 20011128 (60) <-- |
| | US 2001-334233P | 20011128 (60) <-- |
| | US 2001-344692P | 20011019 (60) <-- |
| | US 2001-328523P | 20011010 (60) <-- |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MORGAN, LEWIS & BOCKIUS LLP, 1701 MARKET STREET,
PHILADELPHIA, PA, 19103-2921
NUMBER OF CLAIMS: 111
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 497 Drawing Page(s)
LINE COUNT: 19059
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention includes methods and compositions for remodeling a peptide molecule, including the addition or deletion of one or more glycosyl groups to a peptide, and/or the addition of a modifying group to a peptide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L47 ANSWER 6 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2004:184970 USPATFULL
TITLE: Glycoconjugation methods and proteins/peptides produced by the methods
INVENTOR(S): DeFrees, Shawn, North Wales, PA, UNITED STATES
Zopf, David, Wayne, PA, UNITED STATES
Bayer, Robert, San Diego, CA, UNITED STATES
Bowe, Caryn, Doylestown, PA, UNITED STATES
Hakes, David, Willow Grove, PA, UNITED STATES
Chen, Xi, Lansdale, PA, UNITED STATES
PATENT ASSIGNEE(S): Neose Technologies, Inc. (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|---|------|---------------|
| PATENT INFORMATION: | US 2004142856 | A1 | 20040722 |
| APPLICATION INFO.: | US 2003-410913 | A1 | 20030409 (10) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 2003-360779, filed on 19 Feb 2003, PENDING Continuation-in-part of Ser. No. US 2003-360770, filed on 6 Jan 2003, PENDING Continuation-in-part of Ser. No. US 2002-287994, filed on 5 Nov 2002, PENDING Continuation of Ser. No. WO 2002-US32263, filed on 9 Oct 2002, PENDING | | |

| | NUMBER | DATE | |
|-----------------------|-----------------|---------------|-----|
| PRIORITY INFORMATION: | US 2002-407527P | 20020828 (60) | <-- |
| | US 2002-407527P | 20020828 (60) | <-- |
| | US 2002-404249P | 20020816 (60) | <-- |
| | US 2002-396594P | 20020717 (60) | <-- |
| | US 2002-391777P | 20020625 (60) | <-- |
| | US 2002-387292P | 20020607 (60) | <-- |
| | US 2001-334301P | 20011128 (60) | <-- |
| | US 2001-334233P | 20011128 (60) | <-- |
| | US 2001-334692P | 20011121 (60) | <-- |
| | US 2001-328523P | 20011010 (60) | <-- |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MORGAN, LEWIS & BOCKIUS LLP, 1701 MARKET STREET, PHILADELPHIA, PA, 19103-2921
NUMBER OF CLAIMS: 88
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 497 Drawing Page(s)
LINE COUNT: 16544

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention includes methods and compositions for remodeling a peptide molecule, including the addition or deletion of one or more glycosyl groups to a peptide, and/or the addition of a modifying group to a peptide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L47 ANSWER 7 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2004:178391 USPATFULL

TITLE: Remodeling and glycoconjugation of peptides
INVENTOR(S): DeFrees, Shawn, North Wales, PA, UNITED STATES
Zopf, David, Wayne, PA, UNITED STATES
Bayer, Robert, San Diego, CA, UNITED STATES
Bowe, Caryn, Doylestown, PA, UNITED STATES
Hakes, David, Willow Grove, PA, UNITED STATES
Chen, Xi, Lansdale, PA, UNITED STATES
PATENT ASSIGNEE(S): Neose Technologies, Inc. (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|---------------|
| PATENT INFORMATION: | US 2004137557 | A1 | 20040715 |
| APPLICATION INFO.: | US 2002-287994 | A1 | 20021105 (10) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. WO 2002-US32263, filed on 9 Oct 2002, PENDING | | |

| | NUMBER | DATE | |
|-----------------------|-----------------|---------------|-----|
| PRIORITY INFORMATION: | US 2002-407527P | 20020828 (60) | <-- |
| | US 2002-404249P | 20020816 (60) | <-- |
| | US 2002-396594P | 20020717 (60) | <-- |
| | US 2002-391777P | 20020625 (60) | <-- |
| | US 2002-387292P | 20020607 (60) | <-- |
| | US 2001-334301P | 20011128 (60) | <-- |
| | US 2001-334233P | 20011128 (60) | <-- |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MORGAN, LEWIS & BOCKIUS LLP, 1701 MARKET STREET,
PHILADELPHIA, PA, 19103-2921

NUMBER OF CLAIMS: 447
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 345 Drawing Page(s)
LINE COUNT: 16205

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention includes methods and compositions for remodeling a peptide molecule, including the addition or deletion of one or more glycosyl groups to a peptide, and/or the addition of a modifying group a peptide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L47 ANSWER 8 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2004:173771 USPATFULL
TITLE: Enzyme
INVENTOR(S): Rossiter, John, Kent, UNITED KINGDOM
Bones, Atle, Trondheim, NORWAY
Jones, Alex, Kent, UNITED KINGDOM
Winge, Per, Trondheim, NORWAY

| | NUMBER | KIND | DATE |
|---------------------|----------------|------|---------------|
| PATENT INFORMATION: | US 2004133936 | A1 | 20040708 |
| APPLICATION INFO.: | US 2003-362024 | A1 | 20030925 (10) |
| | WO 2001-GB3670 | | 20010816 |

| | NUMBER | DATE | |
|-----------------------|--|----------|-----|
| PRIORITY INFORMATION: | GB 2000-20331 | 20000817 | <-- |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | APPLICATION | | |
| LEGAL REPRESENTATIVE: | NIXON & VANDERHYE, PC, 1100 N GLEBE ROAD, 8TH FLOOR, | | |

ARLINGTON, VA, 22201-4714
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Page(s)
LINE COUNT: 2490
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Amino acid sequences and nucleotide sequences relating to aphid
myrosinase are described. In a preferred aspect, the amino acid sequence
comprises the sequence presented as SEQ ID Number 1.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L47 ANSWER 9 OF 25 USPATFULL on STN
ACCESSION NUMBER: 2004:172476 USPATFULL
TITLE: Glycopegylation methods and proteins/peptides produced
by the methods
INVENTOR(S): DeFrees, Shawn, North Wales, PA, UNITED STATES
Zopf, David, Wayne, PA, UNITED STATES
Bayer, Robert, San Diego, CA, UNITED STATES
Bowe, Caryn, Doylestown, PA, UNITED STATES
Hakes, David, Willow Grove, PA, UNITED STATES
Chen, Xi, Lansdale, PA, UNITED STATES
PATENT ASSIGNEE(S): Neose Technologies, Inc. (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|---|------|---------------|
| PATENT INFORMATION: | US 2004132640 | A1 | 20040708 |
| APPLICATION INFO.: | US 2003-411012 | A1 | 20030409 (10) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. WO 2002-US32263, filed on 9 Oct 2002, PENDING | | |

| | NUMBER | DATE | |
|-----------------------|-----------------|---------------|-----|
| PRIORITY INFORMATION: | US 2002-407527P | 20020828 (60) | <-- |
| | US 2002-404249P | 20020816 (60) | <-- |
| | US 2002-396594P | 20020717 (60) | <-- |
| | US 2002-391777P | 20020625 (60) | <-- |
| | US 2002-387292P | 20020607 (60) | <-- |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MORGAN, LEWIS & BOCKIUS LLP, 1701 MARKET STREET,
PHILADELPHIA, PA, 19103-2921

NUMBER OF CLAIMS: 77
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 497 Drawing Page(s)
LINE COUNT: 19255

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention includes methods and compositions for remodeling a peptide
molecule, including the addition or deletion of one or more glycosyl
groups to a peptide, and/or the addition of a modifying group to a
peptide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L47 ANSWER 10 OF 25 USPATFULL on STN
ACCESSION NUMBER: 2004:165351 USPATFULL
TITLE: Follicle stimulating hormone: remodeling and
glycoconjugation of FSH
INVENTOR(S): DeFrees, Shawn, North Wales, PA, UNITED STATES
Zopf, David, Wayne, PA, UNITED STATES

Bayer, Robert, San Diego, CA, UNITED STATES
Bowe, Caryn, Doylestown, PA, UNITED STATES
Hakes, David, Willow Grove, PA, UNITED STATES
Chen, Xi, Lansdale, PA, UNITED STATES
PATENT ASSIGNEE(S): Neose Technologies, Inc. (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|---|------|---------------|
| PATENT INFORMATION: | US 2004126838 | A1 | 20040701 |
| APPLICATION INFO.: | US 2003-410997 | A1 | 20030409 (10) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 2003-360779, filed on 19 Feb 2003, PENDING Continuation-in-part of Ser. No. US 2003-360770, filed on 6 Jan 2003, PENDING Continuation-in-part of Ser. No. US 2002-287994, filed on 5 Nov 2002, PENDING Continuation of Ser. No. WO 2002-US32263, filed on 9 Oct 2002, PENDING | | |

| | NUMBER | DATE | |
|-----------------------|-----------------|---------------|-----|
| PRIORITY INFORMATION: | US 2002-407527P | 20020828 (60) | <-- |
| | US 2002-404249P | 20020816 (60) | <-- |
| | US 2002-396594P | 20020717 (60) | <-- |
| | US 2002-391777P | 20020625 (60) | <-- |
| | US 2002-387292P | 20020607 (60) | <-- |
| | US 2001-334301P | 20011128 (60) | <-- |
| | US 2001-334233P | 20011128 (60) | <-- |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MORGAN, LEWIS & BOCKIUS LLP, 1701 MARKET STREET, PHILADELPHIA, PA, 19103-2921

NUMBER OF CLAIMS: 115
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 497 Drawing Page(s)
LINE COUNT: 19355

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention includes methods and compositions for remodeling a peptide molecule, including the addition or deletion of one or more glycosyl groups to a peptide, and/or the addition of a modifying group to a peptide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L47 ANSWER 11 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2004:150947 USPATFULL

TITLE: Interferon beta: remodeling and glycoconjugation of interferon beta

INVENTOR(S): DeFrees, Shawn, North Wales, PA, UNITED STATES
Zopf, David, Wayne, PA, UNITED STATES
Bayer, Robert, San Diego, CA, UNITED STATES
Bowe, Caryn, Doylestown, PA, UNITED STATES
Hakes, David, Willow Grove, PA, UNITED STATES
Chen, Xi, Lansdale, PA, UNITED STATES

PATENT ASSIGNEE(S): Neose Technologies, Inc. (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|---|------|---------------|
| PATENT INFORMATION: | US 2004115168 | A1 | 20040617 |
| APPLICATION INFO.: | US 2003-410930 | A1 | 20030409 (10) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 2003-360779, filed on 19 Feb 2003, PENDING Continuation-in-part of Ser. | | |

No. US 2003-360770, filed on 6 Jan 2003, PENDING
Continuation-in-part of Ser. No. US 2002-287994, filed
on 5 Nov 2002, PENDING Continuation of Ser. No. WO
2002-US32263, filed on 9 Oct 2002, PENDING

| | NUMBER | DATE | |
|-----------------------|-----------------|---------------|-----|
| PRIORITY INFORMATION: | US 2002-407527P | 20020828 (60) | <-- |
| | US 2002-404249P | 20020816 (60) | <-- |
| | US 2002-396594P | 20020717 (60) | <-- |
| | US 2002-391777P | 20020625 (60) | <-- |
| | US 2002-387292P | 20020607 (60) | <-- |
| | US 2001-334301P | 20011128 (60) | <-- |
| | US 2001-334233P | 20011128 (60) | <-- |
| | US 2001-344692P | 20011019 (60) | <-- |
| | US 2001-328523P | 20011010 (60) | <-- |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MORGAN, LEWIS & BOCKIUS LLP, 1701 MARKET STREET,
PHILADELPHIA, PA, 19103-2921

NUMBER OF CLAIMS: 119
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 497 Drawing Page(s)
LINE COUNT: 19412

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention includes methods and compositions for remodeling a peptide molecule, including the addition or deletion of one or more glycosyl groups to a peptide, and/or the addition of a modifying group to a peptide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L47 ANSWER 12 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2004:107626 USPATFULL
TITLE: Interferon alpha: remodeling and glycoconjugation of
interferon alpha
INVENTOR(S): DeFrees, Shawn, North Wales, PA, UNITED STATES
Zopf, David, Wayne, PA, UNITED STATES
Bayer, Robert, San Diego, CA, UNITED STATES
Bowe, Caryn, Doylestown, PA, UNITED STATES
Hakes, David, Willow Grove, PA, UNITED STATES
Chen, Xi, Lansdale, PA, UNITED STATES
PATENT ASSIGNEE(S): Neose Technologies, Inc. (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|---------------|
| PATENT INFORMATION: | US 2004082026 | A1 | 20040429 |
| APPLICATION INFO.: | US 2003-411049 | A1 | 20030409 (10) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 2003-360779, filed on 19 Feb 2003, PENDING Continuation-in-part of Ser. No. US 2003-360770, filed on 6 Jan 2003, PENDING Continuation-in-part of Ser. No. US 2002-287994, filed on 5 Nov 2002, PENDING Continuation of Ser. No. WO 2002-US32263, filed on 9 Oct 2002, PENDING | | |

| | NUMBER | DATE | |
|-----------------------|-----------------|---------------|-----|
| PRIORITY INFORMATION: | US 2002-407527P | 20020828 (60) | <-- |
| | US 2002-404249P | 20020816 (60) | <-- |
| | US 2002-396594P | 20020717 (60) | <-- |

| | | |
|-----------------|---------------|-----|
| US 2002-391777P | 20020625 (60) | <-- |
| US 2002-387292P | 20020607 (60) | <-- |
| US 2001-334301P | 20011128 (60) | <-- |
| US 2001-334233P | 20011128 (60) | <-- |
| US 2001-344692P | 20011019 (60) | <-- |
| US 2001-328523P | 20011010 (60) | <-- |

DOCUMENT TYPE: Utility
 FILE SEGMENT: APPLICATION
 LEGAL REPRESENTATIVE: MORGAN, LEWIS & BOCKIUS LLP, 1701 MARKET STREET,
 PHILADELPHIA, PA, 19103-2921
 NUMBER OF CLAIMS: 126
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 497 Drawing Page(s)
 LINE COUNT: 19445

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention includes a multitude of methods and compositions for remodeling a peptide molecule, including the addition or deletion of one or more glycosyl groups to a peptide, and/or the addition of a modifying group to a peptide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L47 ANSWER 13 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2004:101966 USPATFULL
 TITLE: Granulocyte colony stimulating factor: remodeling and glycoconjugation of G-CSF
 INVENTOR(S): DeFrees, Shawn, North Wales, PA, UNITED STATES
 Zopf, David, Wayne, PA, UNITED STATES
 Bayer, Robert, San Diego, CA, UNITED STATES
 Bowe, Caryn, Doylestown, PA, UNITED STATES
 Hakes, David, Willow Grove, PA, UNITED STATES
 Chen, Xi, Lansdale, PA, UNITED STATES
 PATENT ASSIGNEE(S): Neose Technologies, Inc. (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|---|------|---------------|
| PATENT INFORMATION: | US 2004077836 | A1 | 20040422 |
| APPLICATION INFO.: | US 2003-410962 | A1 | 20030409 (10) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 2003-360779, filed on 19 Feb 2003, PENDING Continuation-in-part of Ser. No. US 2003-360770, filed on 6 Jan 2003, PENDING Continuation-in-part of Ser. No. US 2002-287994, filed on 5 Nov 2002, PENDING Continuation of Ser. No. WO 2002-US32263, filed on 9 Oct 2002, PENDING | | |

| | NUMBER | DATE |
|-----------------------|-----------------|---------------|
| PRIORITY INFORMATION: | US 2002-407527P | 20020828 (60) |
| | US 2002-404249P | 20020816 (60) |
| | US 2002-396594P | 20020717 (60) |
| | US 2002-391777P | 20020625 (60) |
| | US 2002-387292P | 20020607 (60) |
| | US 2001-334301P | 20011128 (60) |
| | US 2001-334233P | 20011128 (60) |
| | US 2001-344692P | 20011019 (60) |
| | US 2001-328523P | 20011010 (60) |

DOCUMENT TYPE: Utility
 FILE SEGMENT: APPLICATION
 LEGAL REPRESENTATIVE: MORGAN, LEWIS & BOCKIUS LLP, 1701 MARKET STREET,
 PHILADELPHIA, PA, 19103-2921

NUMBER OF CLAIMS: 111
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 497 Drawing Page(s)
LINE COUNT: 19316

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention includes methods and compositions for remodeling a peptide molecule, including the addition or deletion of one or more glycosyl groups to a peptide, and/or the addition of a modifying group to a peptide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L47 ANSWER 14 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2004:101228 USPATFULL

TITLE: Whole cell engineering by mutagenizing a substantial portion of a starting genome, combining mutations, and optionally repeating

INVENTOR(S): Short, Jay M., Rancho Santa Fe, CA, UNITED STATES

| | NUMBER | KIND | DATE |
|-----------------------|---|------|---------------|
| PATENT INFORMATION: | US 2004077090 | A1 | 20040422 |
| APPLICATION INFO.: | US 2003-383798 | A1 | 20030306 (10) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. US 2000-677584, filed on 30 Sep 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-594459, filed on 14 Jun 2000, GRANTED, Pat. No. US 6605449 Continuation-in-part of Ser. No. US 2000-522289, filed on 9 Mar 2000, GRANTED, Pat. No. US 6358709 Continuation-in-part of Ser. No. US 2000-498557, filed on 4 Feb 2000, PENDING Continuation-in-part of Ser. No. US 2000-495052, filed on 31 Jan 2000, GRANTED, Pat. No. US 6479258 | | |

| | NUMBER | DATE | |
|-----------------------|---|---------------|-----|
| PRIORITY INFORMATION: | US 1999-156815P | 19990929 (60) | <-- |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | APPLICATION | | |
| LEGAL REPRESENTATIVE: | HALE AND DORR LLP, 300 PARK AVENUE, NEW YORK, NY, 10022 | | |
| NUMBER OF CLAIMS: | 22 | | |
| EXEMPLARY CLAIM: | 1 | | |
| NUMBER OF DRAWINGS: | 28 Drawing Page(s) | | |
| LINE COUNT: | 37121 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An invention comprising cellular transformation, directed evolution, and screening methods for creating novel transgenic organisms having desirable properties. Thus in one aspect, this invention relates to a method of generating a transgenic organism, such as a microbe or a plant, having a plurality of traits that are differentially activatable. Also, a method of retooling genes and gene pathways by the introduction of regulatory sequences, such as promoters, that are operable in an intended host, thus conferring operability to a novel gene pathway when it is introduced into an intended host. For example a novel man-made gene pathway, generated based on microbially-derived progenitor templates, that is operable in a plant cell. Furthermore, a method of generating novel host organisms having increased expression of desirable traits, recombinant genes, and gene products.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L47 ANSWER 15 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2004:83455 USPATFULL
TITLE: Protein remodeling methods and proteins/peptides
produced by the methods
INVENTOR(S): DeFrees, Shawn, North Wales, PA, UNITED STATES
Zopf, David, Wayne, PA, UNITED STATES
Bayer, Robert, San Diego, CA, UNITED STATES
Hakes, David, Willow Grove, PA, UNITED STATES
Chen, Xi, Lansdale, PA, UNITED STATES
PATENT ASSIGNEE(S): Neose Technologies, Inc. (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|---------------|
| PATENT INFORMATION: | US 2004063911 | A1 | 20040401 |
| APPLICATION INFO.: | US 2003-411026 | A1 | 20030409 (10) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 2003-360779, filed on 19 Feb 2003, PENDING Continuation-in-part of Ser. No. US 2003-360770, filed on 6 Jan 2003, PENDING Continuation-in-part of Ser. No. US 2002-287994, filed on 5 Nov 2002, PENDING Continuation of Ser. No. WO 2002-US32263, filed on 9 Oct 2002, PENDING | | |

| | NUMBER | DATE | |
|-----------------------|-----------------|---------------|-----|
| PRIORITY INFORMATION: | US 2002-407527P | 20020828 (60) | <-- |
| | US 2002-404249P | 20020816 (60) | <-- |
| | US 2002-396594P | 20020717 (60) | <-- |
| | US 2002-391777P | 20020625 (60) | <-- |
| | US 2002-387292P | 20020607 (60) | <-- |
| | US 2001-334301P | 20011128 (60) | <-- |
| | US 2001-334233P | 20011128 (60) | <-- |
| | US 2001-344692P | 20011019 (60) | <-- |
| | US 2001-328523P | 20011010 (60) | <-- |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MORGAN, LEWIS & BOCKIUS LLP, 1701 MARKET STREET,
PHILADELPHIA, PA, 19103-2921

NUMBER OF CLAIMS: 39
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 497 Drawing Page(s)
LINE COUNT: 18872

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention includes methods and compositions for remodeling a peptide molecule, including the addition or deletion of one or more glycosyl groups to a peptide, and/or the addition of a modifying group to a peptide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L47 ANSWER 16 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2004:57444 USPATFULL
TITLE: Alpha galactosidase a: remodeling and glycoconjugation
of alpha galactosidase A
INVENTOR(S): DeFrees, Shawn, North Wales, PA, UNITED STATES
Zopf, David, Wayne, PA, UNITED STATES
Bayer, Robert, San Diego, CA, UNITED STATES
Bowe, Caryn, Doylestown, PA, UNITED STATES
Hakes, David, Willow Grove, PA, UNITED STATES
Chen, Xi, Lansdale, PA, UNITED STATES
PATENT ASSIGNEE(S): Neose Technologies, Inc. (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|---------------|
| PATENT INFORMATION: | US 2004043446 | A1 | 20040304 |
| APPLICATION INFO.: | US 2003-411037 | A1 | 20030409 (10) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. WO 2002-US32263, filed on 9 Oct 2002, PENDING | | |

| | NUMBER | DATE | |
|--|---|----------|----------|
| PRIORITY INFORMATION: | US 2002-407527P | 20020828 | (60) <-- |
| | US 2002-404249P | 20020816 | (60) <-- |
| | US 2002-396594P | 20020717 | (60) <-- |
| | US 2002-391777P | 20020625 | (60) <-- |
| | US 2002-387292P | 20020607 | (60) <-- |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | APPLICATION | | |
| LEGAL REPRESENTATIVE: | MORGAN, LEWIS & BOCKIUS LLP, 1701 MARKET STREET, PHILADELPHIA, PA, 19103-2921 | | |
| NUMBER OF CLAIMS: | 122 | | |
| EXEMPLARY CLAIM: | 1 | | |
| NUMBER OF DRAWINGS: | 497 Drawing Page(s) | | |
| LINE COUNT: | 19395 | | |
| CAS INDEXING IS AVAILABLE FOR THIS PATENT. | | | |
| AB | The invention includes methods and compositions for remodeling a peptide molecule, including the addition or deletion of one or more glycosyl groups to a peptide, and/or the addition of a modifying group to a peptide. | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L47 ANSWER 17 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2003:243837 USPATFULL

TITLE: Lipophilin complexes for use in cancer diagnosis and therapy

INVENTOR(S): Fanger, Gary R., Mill Creek, WA, UNITED STATES
 Durham, Margarita, Seattle, WA, UNITED STATES
 Houghton, Raymond L., Bothell, WA, UNITED STATES
 Dillon, Davin C., Issaquah, WA, UNITED STATES
 Carter, Darrick, Seattle, WA, UNITED STATES
 Persing, David H., Redmond, WA, UNITED STATES

PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|---------------|
| PATENT INFORMATION: | US 2003170246 | A1 | 20030911 <-- |
| APPLICATION INFO.: | US 2002-96319 | A1 | 20020312 (10) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 2001-905673, filed on 13 Jul 2001, PENDING Continuation-in-part of Ser. No. US 2001-780842, filed on 8 Feb 2001, ABANDONED | | |

| | NUMBER | DATE |
|-----------------------|---|-------------------|
| PRIORITY INFORMATION: | US 2000-215735P | 20000628 (60) <-- |
| | US 2000-183495P | 20000211 (60) <-- |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | APPLICATION | |
| LEGAL REPRESENTATIVE: | SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092 | |

NUMBER OF CLAIMS: 57
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 16 Drawing Page(s)
 LINE COUNT: 3906

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of breast, ovarian and prostate cancer are disclosed. Compositions may comprise one or more lipophilin fusion proteins, which comprise at least two different lipophilin-like polypeptides linked by a peptide bond. Such compositions may be used for the prevention and treatment of breast, ovarian and prostate cancer. Diagnostic methods based on detecting the presence of lipophilin complexes, or antibodies thereto, in a patient are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L47 ANSWER 18 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2003:237907 USPATFULL
 TITLE: Compositions and methods for the therapy and diagnosis of colon cancer
 INVENTOR(S): King, Gordon E., Shoreline, WA, UNITED STATES
 Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
 Xu, Jiangchun, Bellevue, WA, UNITED STATES
 Secrist, Heather, Seattle, WA, UNITED STATES
 Jiang, Yuqiu, Kent, WA, UNITED STATES
 PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)

| | NUMBER | KIND | DATE | |
|-----------------------|--|------|----------|------|
| PATENT INFORMATION: | US 2003166064 | A1 | 20030904 | <-- |
| APPLICATION INFO.: | US 2002-99926 | A1 | 20020314 | (10) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 2001-33528, filed on 26 Dec 2001, PENDING Continuation-in-part of Ser. No. US 2001-920300, filed on 31 Jul 2001, PENDING | | | |

| | NUMBER | DATE | |
|-----------------------|---|----------|----------|
| PRIORITY INFORMATION: | US 2001-302051P | 20010629 | (60) <-- |
| | US 2001-279763P | 20010328 | (60) <-- |
| | US 2000-223283P | 20000803 | (60) <-- |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | APPLICATION | | |
| LEGAL REPRESENTATIVE: | SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092 | | |
| NUMBER OF CLAIMS: | 17 | | |
| EXEMPLARY CLAIM: | 1 | | |
| LINE COUNT: | 8531 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L47 ANSWER 19 OF 25 USPATFULL on STN
 ACCESSION NUMBER: 2003:228246 USPATFULL
 TITLE: Methods of determining SAM-dependent methyltransferase activity using a mutant SAH hydrolase
 INVENTOR(S): Yuan, Chong-Sheng, San Diego, CA, United States
 PATENT ASSIGNEE(S): General Atomics, San Diego, CA, United States (U.S. corporation)

| | NUMBER | KIND | DATE | |
|-----------------------|--|------|----------|-----|
| PATENT INFORMATION: | US 6610504 | B1 | 20030826 | <-- |
| APPLICATION INFO.: | US 2000-546013 | | 20000410 | (9) |
| DOCUMENT TYPE: | Utility | | | |
| FILE SEGMENT: | GRANTED | | | |
| PRIMARY EXAMINER: | Prouty, Rebecca E. | | | |
| ASSISTANT EXAMINER: | Steadman, David J. | | | |
| LEGAL REPRESENTATIVE: | Morrison & Foerster LLP | | | |
| NUMBER OF CLAIMS: | 17 | | | |
| EXEMPLARY CLAIM: | 1 | | | |
| NUMBER OF DRAWINGS: | 0 Drawing Figure(s); 0 Drawing Page(s) | | | |
| LINE COUNT: | 6392 | | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to compositions and methods for assaying the activity of methyltransferases, such as S-adenosylmethionine (SAM)-dependent methyltransferases. The methods can be used for screening for modulators of such methyltransferases, for identifying substrates and for diagnostics. The methods are amenable for use in high throughput formats. Kits for performing the methods are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L47 ANSWER 20 OF 25 USPATFULL on STN
 ACCESSION NUMBER: 2003:106233 USPATFULL
 TITLE: Compositions and methods for the therapy and diagnosis of pancreatic cancer
 INVENTOR(S): Benson, Darin R., Seattle, WA, UNITED STATES
 Kalos, Michael D., Seattle, WA, UNITED STATES
 Lodes, Michael J., Seattle, WA, UNITED STATES
 Persing, David H., Redmond, WA, UNITED STATES
 Hepler, William T., Seattle, WA, UNITED STATES
 Jiang, Yuqiu, Kent, WA, UNITED STATES
 PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)

| | NUMBER | KIND | DATE | |
|---------------------|---------------|------|----------|------|
| PATENT INFORMATION: | US 2003073144 | A1 | 20030417 | <-- |
| APPLICATION INFO.: | US 2002-60036 | A1 | 20020130 | (10) |

| | NUMBER | DATE | |
|-----------------------|-----------------|---------------|-----|
| PRIORITY INFORMATION: | US 2001-333626P | 20011127 (60) | <-- |
| | US 2001-305484P | 20010712 (60) | <-- |
| | US 2001-265305P | 20010130 (60) | <-- |
| | US 2001-267568P | 20010209 (60) | <-- |
| | US 2001-313999P | 20010820 (60) | <-- |
| | US 2001-291631P | 20010516 (60) | <-- |
| | US 2001-287112P | 20010428 (60) | <-- |
| | US 2001-278651P | 20010321 (60) | <-- |

US 2001-265682P 20010131 (60) <--
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH
AVE, SUITE 6300, SEATTLE, WA, 98104-7092
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
LINE COUNT: 14253

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly pancreatic cancer, are disclosed. Illustrative compositions comprise one or more pancreatic tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly pancreatic cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L47 ANSWER 21 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2003:65344 USPATFULL

TITLE: Compositions and methods for the therapy, diagnosis and monitoring of breast cancer

INVENTOR(S): Fling, Steven P., Bainbridge Island, WA, UNITED STATES
Foy, Teresa M., Federal Way, WA, UNITED STATES
Clapper, Jonathan D., Seattle, WA, UNITED STATES
Wang, Aijun, Issaquah, WA, UNITED STATES
Johnson, Jeffrey C., Des Moines, WA, UNITED STATES
McNeill, Patricia D., Federal Way, WA, UNITED STATES
Sutherland, R. Alec, Bothell, WA, UNITED STATES
PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES, 98104
(U.S. corporation)

| | NUMBER | KIND | DATE | |
|-----------------------|--|------|----------|------|
| PATENT INFORMATION: | US 2003045468 | A1 | 20030306 | <-- |
| APPLICATION INFO.: | US 2002-42945 | A1 | 20020108 | (10) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 2001-8045, filed on 8 Dec 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-757417, filed on 8 Jan 2001, PENDING Continuation-in-part of Ser. No. US 2000-580376, filed on 26 May 2000, PENDING | | | |

| | NUMBER | DATE | |
|-----------------------|--|---------------|-----|
| PRIORITY INFORMATION: | US 1999-137048P | 19990601 (60) | <-- |
| | US 1999-136528P | 19990528 (60) | <-- |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | APPLICATION | | |
| LEGAL REPRESENTATIVE: | SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092 | | |
| NUMBER OF CLAIMS: | 23 | | |
| EXEMPLARY CLAIM: | 1 | | |
| NUMBER OF DRAWINGS: | 32 Drawing Page(s) | | |
| LINE COUNT: | 3064 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy, diagnosis and monitoring of breast cancer are disclosed. Compositions may comprise one or more mammaglobin epitopes, or antibodies or T cells thereto, and may be used,

for example, for the prevention and treatment of breast cancer.
Diagnostic methods based on detecting the presence of mammaglobin epitopes, or antibodies or T cells thereto, in a sample are also provided. Also provided are methods for detecting RNA encoding mammaglobin in patient blood or fractions thereof. These methods may be used to detect and/or monitor the progression of breast cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L47 ANSWER 22 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2002:272801 USPATFULL

TITLE: Compositions and methods for the therapy and diagnosis of colon cancer

INVENTOR(S): Stolk, John A., Bothell, WA, UNITED STATES
Xu, Jiangchun, Bellevue, WA, UNITED STATES
Chenault, Ruth A., Seattle, WA, UNITED STATES
Meagher, Madeleine Joy, Seattle, WA, UNITED STATES

PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES, 98104
(U.S. corporation)

| | NUMBER | KIND | DATE | |
|---------------------|----------------|------|--------------|-----|
| PATENT INFORMATION: | US 2002150922 | A1 | 20021017 | <-- |
| APPLICATION INFO.: | US 2001-998598 | A1 | 20011116 (9) | |

| | NUMBER | DATE | |
|-----------------------|-----------------|---------------|-----|
| PRIORITY INFORMATION: | US 2001-304037P | 20010710 (60) | <-- |
| | US 2001-279670P | 20010328 (60) | <-- |
| | US 2001-267011P | 20010206 (60) | <-- |
| | US 2000-252222P | 20001120 (60) | <-- |

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092

NUMBER OF CLAIMS: 17

EXEMPLARY CLAIM: 1

LINE COUNT: 9233

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L47 ANSWER 23 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2002:243051 USPATFULL

TITLE: Compositions and methods for the therapy and diagnosis of ovarian cancer

INVENTOR(S): Algate, Paul A., Issaquah, WA, UNITED STATES
Jones, Robert, Seattle, WA, UNITED STATES
Harlocker, Susan L., Seattle, WA, UNITED STATES

PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES, 98104
(U.S. corporation)

| | NUMBER | KIND | DATE | |
|---------------------|----------------|------|----------|-----|
| PATENT INFORMATION: | US 2002132237 | A1 | 20020919 | <-- |
| APPLICATION INFO.: | US 2001-867701 | A1 | 20010529 | (9) |

| | NUMBER | DATE | |
|-----------------------|---|----------|----------|
| PRIORITY INFORMATION: | US 2000-207484P | 20000526 | (60) <-- |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | APPLICATION | | |
| LEGAL REPRESENTATIVE: | SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092 | | |
| NUMBER OF CLAIMS: | 11 | | |
| EXEMPLARY CLAIM: | 1 | | |
| LINE COUNT: | 25718 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly ovarian cancer, are disclosed. Illustrative compositions comprise one or more ovarian tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly ovarian cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L47 ANSWER 24 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2002:242791 USPATFULL

TITLE: Compositions and methods for the therapy and diagnosis of colon cancer

INVENTOR(S): King, Gordon E., Shoreline, WA, UNITED STATES
Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
Xu, Jiangchun, Bellevue, WA, UNITED STATES
Secrist, Heather, Seattle, WA, UNITED STATES

PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES (U.S. corporation)

| | NUMBER | KIND | DATE | |
|-----------------------|--|------|----------|------|
| PATENT INFORMATION: | US 2002131971 | A1 | 20020919 | <-- |
| APPLICATION INFO.: | US 2001-33528 | A1 | 20011226 | (10) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 2001-920300, filed on 31 Jul 2001, PENDING | | | |

| | NUMBER | DATE | |
|-----------------------|---|----------|----------|
| PRIORITY INFORMATION: | US 2001-302051P | 20010629 | (60) <-- |
| | US 2001-279763P | 20010328 | (60) <-- |
| | US 2000-223283P | 20000803 | (60) <-- |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | APPLICATION | | |
| LEGAL REPRESENTATIVE: | SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092 | | |
| NUMBER OF CLAIMS: | 17 | | |
| EXEMPLARY CLAIM: | 1 | | |
| LINE COUNT: | 8083 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions

comprise one or more colon tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L47 ANSWER 25 OF 25 USPATFULL on STN

ACCESSION NUMBER: 2002:157612 USPATFULL

TITLE: Compositions and methods for the therapy, diagnosis and monitoring of breast cancer

INVENTOR(S): Fanger, Gary R., Mill Creek, WA, UNITED STATES
Foy, Teresa M., Federal Way, WA, UNITED STATES
Houghton, Raymond L., Bothell, WA, UNITED STATES
Reed, Steven G., Bellevue, WA, UNITED STATES

| | NUMBER | KIND | DATE | |
|-----------------------|---|------|----------|-----|
| PATENT INFORMATION: | US 2002082216 | A1 | 20020627 | <-- |
| APPLICATION INFO.: | US 2001-757417 | A1 | 20010108 | (9) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 2000-580376, filed on 26 May 2000, PENDING | | | |
| DOCUMENT TYPE: | Utility | | | |
| FILE SEGMENT: | APPLICATION | | | |
| LEGAL REPRESENTATIVE: | SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092 | | | |
| NUMBER OF CLAIMS: | 73 | | | |
| EXEMPLARY CLAIM: | 1 | | | |
| NUMBER OF DRAWINGS: | 32 Drawing Page(s) | | | |
| LINE COUNT: | 2697 | | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy, diagnosis and monitoring of breast cancer are disclosed. Compositions may comprise one or more mammaglobin epitopes, or antibodies or T cells thereto, and may be used, for example, for the prevention and treatment of breast cancer. Diagnostic methods based on detecting the presence of mammaglobin epitopes, or antibodies or T cells thereto, in a sample are also provided. Also provided are methods for detecting RNA encoding mammaglobin in patient blood or fractions thereof. These methods may be used to detect and/or monitor the progression of breast cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d ibib abs ind 130 1-1

L30 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:394694 HCAPLUS
DOCUMENT NUMBER: 142:407215
TITLE: Enrichment and tagging of **glycosylated proteins**
INVENTOR(S): **Robotti, Karla M.**
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 11 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| ----- | --- | ----- | ----- | ----- |
| US 2005095647 | A1 | 20050505 | US 2003-699449 | 20031031 |
| PRIORITY APPLN. INFO.: | | | US 2003-699449 | 20031031 |

AB A method useful in the anal. of **glycosylated proteins**, in which a mixture containing **glycosylated proteins** and **unglycosylated proteins** is contacted with a resin that includes a nucleophile bound to a solid support via a linker. The contacting is performed under conditions sufficient to result in removal of the glycosyl group from the **glycosylated proteins** and to concomitantly result in the **deglycosylated proteins** covalently bound to the solid support. The **deglycosylated proteins** bound to the solid support may be rinsed to remove proteins that are not covalently bound to the solid support. The **deglycosylated proteins** are released from the solid support and may be subjected to further purification and/or anal.

IC ICM G01N033-53
ICS C12P021-06

INCL 435007100; 435068100; 436092000

CC 9-16 (Biochemical Methods)

ST enrichment tagging **glycosylated protein**

IT Gel electrophoresis
HPLC
Solid phase synthesis supports
Test kits
(enrichment and tagging of **glycosylated proteins**)

IT Proteins
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(ligand-binding; enrichment and tagging of **glycosylated proteins**)

IT 107-95-9, β -Alanine
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(enrichment and tagging of **glycosylated proteins**)